JUSTICIA BRANDEGEEANA (ACANTHACEAE): NEW TO THE TEXAS FLORA

JASON R. SINGHURST

Wildlife Diversity Program
Texas Parks and Wildlife Department
3000 South IH-35, Suite 100
Austin, Texas 78704
jason.singhurst@tpwd.state.tx.us

WALTER C. HOLMES

Department of Biology
Baylor University
Waco, Texas 76798-7388
walter holmes@baylor.edu

ABSTRACT

Justicia brandegeeana is documented as occurring outside of cultivation in Texas. Several colonies were found growing on a terrace above Coleto Creek in Victoria County. It is suspected that seeds were dispersed from landscape plantings in the Victoria area. Justicia brandegeeana has moderate invasive potential along the Texas coast.

KEY WORDS: Acanthaceae, Justicia, Texas, naturalized

Justicia brandegeeana Wassh. & L.B. Sm. (Acanthaceae), commonly known as shrimpplant or Mexican shrimpplant, was recently documented as naturalizing in Victoria County, Texas. The species has not been previously reported outside of cultivation in Texas (Correll & Johnston 1970; Hatch et al. 1990; Jones et al. 1997; Turner et al. 2003). The species has escaped cultivation and is naturalized in peninsular Florida, where it is reported in eight counties (USDA, NRCS 2012; Wunderlin & Hansen 2012). In Texas, J. brandegeeana has been reported to naturalize in some places on the Texas coastal plain (Kress 2007) but without herbarium specimen evidence.

Justicia brandegeeana is an evergreen perennial shrub native to Mexico and a common ornamental that thrives in the shade in tropical areas (FLORIDATA 2012). The species is named after Townshend Stith Brandegee (1843–1925), botanist and expert on the Cape flora of Baja California. The flowers are white, protruding from rusty-reddish bracts that generally suggest a shrimp, hence the common name. A number of cultivars are available with yellow, pink, and dark brick-red flower bracts. The flower-bract complex attracts hummingbirds and butterflies.

Justicia brandegeeana (Figs. 1, 2) was discovered in a coastal live oak (Quercus virginiana) motte on a creek terrace in Victoria County. The dominant flora included Quercus virginiana, Ilex vomitoria, Vaccinium arboreum, Callicarpa americana, Erythrina herbacea, Malvaviscus drummondii, Smilax bona-nox, Tillandsia recurvata, Sideroxylon lanuginosa, Cenchrus incertus, Toxicodendron radicans, Heterotheca subaxillaris, Froelichia sp., Cyperus sp., and Dichanthelium sp. It is suspected that shrimpplant seeds were dispersed from landscape plantings, possibly by birds, in the Victoria, Texas, area. Numerous colonies (averaging 1 x 1 meters) were present in a slightly over one hectare (three acres) site, with some colonies spreading to 3 x 3 meters. These colonies are reproducing vegetatively through rhizomes and adventitious roots on branches near the ground.



Figure 1. Habit of Justicia brandegeeana in Victoria County, Texas (Singhurst 19318, BAYLU).



Figure 2. Justicia brandegeeana inflorescence and flower (Singhurst 19318, BAYLU).

Voucher specimen. USA. Texas. Victoria Co.: 1.7 mi S of the jct of Dawn Road and Coleto Creek Park Road on Coleto Creek Park Road, to N side of Coleto Creek spillway below dam, then E of dam 0.4 mi, 4 Dec 2012, Singhurst 19318 (BAYLU).

Justicia brandegeeana (Figs. 1, 2) grows in clumps to 1–1.5 meters (3–5 ft) tall and 1 meters (3 ft) wide that occasionally may spread or converge to form larger colonies. The stems are sprawling, weak, and slender. Stems are tipped by drooping spikes about 15 cm long of dark red to rusty brown bracts, each bract enclosing a tongue-like white flower. Shrimpplant is evergreen in mild climates and blooms almost continuously. The leaves are oval, light green, and 5–8 cm long. The young stems and the undersides of the leaves are soft and downy.

ACKNOWLEDGEMENTS

The authors are indebted to Guy Nesom, friend, botanical colleague, and editor of Phytoneuron, for his contributions in preparation of this manuscript for publication.

LITERATURE CITED

- Correll, D.S. and M.C. Johnston. 1970. Manual of the Vascular Plants of Texas. Texas Research Foundation, Renner.
- FLORIDATA. 2012. A photographic encyclopedia of landscape plants. Tallahassee, Florida. http://www.floridata.com/index.cfm
- Hatch, S.L., K.N. Ghandi, and L.E. Brown. 1990. Checklist of the Vascular Plants of Texas. Texas Agricultural Experiment Station Pub. 1655. Texas A&M Univ., College Station.
- Kress, Stephen W. 2007. Hummingbird Gardens: Turning Your Yard Into Hummingbird Heaven. Brooklyn Botanical Garden, Brooklyn, New York.
- Jones, S.D., J.K. Wipff, and P.M. Montgomery. 1997. Vascular Plants of Texas: A Comprehensive Checklist Including Synonymy, Bibliography, and Index. Univ. of Texas Press, Austin.
- Turner, B.L., H. Nichols, G.C. Denny, and O. Doron. 2003. Atlas of the Vascular Plants of Texas, Vol. 1. Sida, Bot. Misc. 24, Bot. Res. Inst. of Texas, Fort Worth.
- USDA, NRCS. 2012. The PLANTS Database. National Plant Data Team, Greensboro, North Carolina. http://plants.usda.gov Accessed December 2012.
- Wunderlin, R.P. and B.F. Hansen. 2012. Atlas of Florida Vascular Plants. [S.M. Landry and K.N. Campbell (application development), Florida Center for Community Design and Research] Inst. for Systematic Botany, Univ. of South Florida, Tampa. http://www.plantatlas.usf.edu/